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DEVELOPMENTS IN MARKETING SPREADS FOR AGRICULTURAL PRODUCTS IN 1959

Marketing Economics Research Division
Agricultural Marketing Service
U. S. Department of Agriculture

(Reprinted from Hearings (Part 2) Before the Subcommittee of the Committee on Appropriations, House of Representatives, Eighty-Sixth Congress, Second Session)

PREFACE

Congress in 1955 directed the Department of Agriculture to make a number of special studies on price spreads (marketing margins) between farmer and consumer. The Department has published the results of several of these studies. The reports published in 1959 and early 1960 containing material prepared for the Subcommittee of the Committee on Appropriations, House of Representatives are summarized in this report. Three similar reports summarize results of earlier studies: Special Margins and Costs Studies, Marketing Research Report No. 167, April 1957; Special Studies of Marketing Costs and Practices, Marketing Research Report No. 240, October 1958; and Developments in Marketing Spreads for Agricultural Products in 1958, AMS-316, June 1959.

The "Marketing Margin"

The marketing margin or farm-retail price spread is an estimate of the charges made by marketing agencies for moving products from the farm to the consumer, including charges for assembling, processing, transporting, and distributing the products.

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May 1960

DEVELOPMENTS IN MARKETING SPREADS FOR AGRICULTURAL PRODUCTS IN 1959

HIGHLIGHTS

1. Retail food prices decreased in 1959 for the first time since 1955, but the annual average was still the second highest on record (fig. 1).

2. The spread between farm and retail prices of food increased slightly so that all of the decline in food prices in 1959 resulted from lower prices to farmers. However, the overall rise in farm-retail spreads of 1 percent was the lowest annual increase in 5 years.

3. Most of the rise in farm-retail spreads was caused by a rise of 6 percent in spreads for meat products in 1959. The only other product group to show a marked increase in spreads was bakery and cereal products.

4. The farmer's share of the dollar spent by consumers for farm foods at retail dropped to an average of 38 cents in 1959, the lowest on record since 1939 (fig. 2).

5. Farm-retail spreads for cotton products rose during the latter part of 1959 as prices to farmers dropped and retail prices of cotton products were a little higher. Mill margins continued the steady rise which began with the cyclical low reached in the second quarter of 1958.

6. Higher retail prices of tobacco products in the 1958-59 marketing season reflected higher prices received by farmers for leaf tobacco. Farm-retail spreads excluding excise taxes were slightly lower than in 1957-58.

RECENT TRENDS IN FOOD PRICES AND MARKETING COSTS

The moderate decline in food prices during 1959 kept the Consumer Price Index (covering all major commodities) from rising as fast as it did in the 1955-58 period, when food prices also were increasing. Since World War II, the only periods of relative stability in the Consumer Price Index have coincided with drops in farm prices of food products (fig. 1).

In 1959, the retail-store cost of a "market basket" of farm food products (representing the average quantity per family of food purchased annually in retail food stores by urban moderate-income families) was $1,040, a decrease of $24, or about 2 percent, from 1958. The farm value of the foods in the market basket dropped from $430 in 1958 to $399 in 1959, a decrease of $31, or 7 percent (table 1).

Marketing margins continued to rise in 1959, so that not all of the decline in prices at the farm level was reflected in lower retail prices. The spread between farm value and retail cost averaged about 1 percent higher in 1959 than in 1958. However, this was the smallest rise in overall marketing margins in several years. Some of the factors contributing to this continuing rise are discussed below:

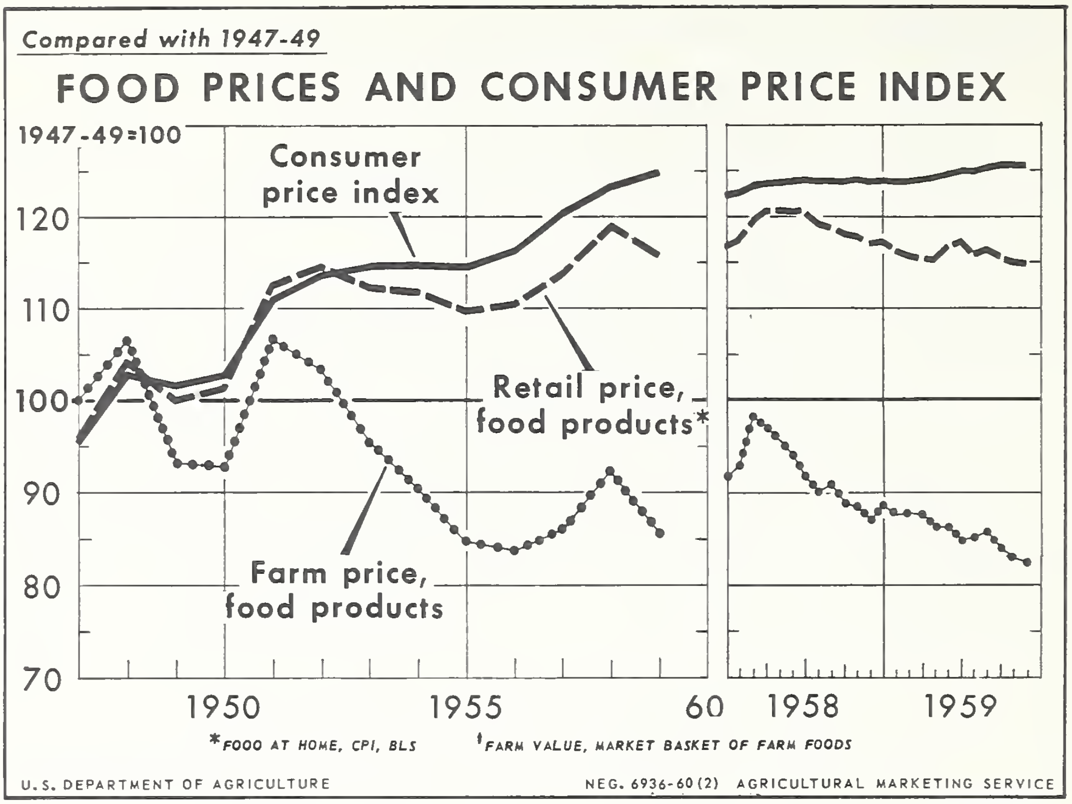


Figure 1

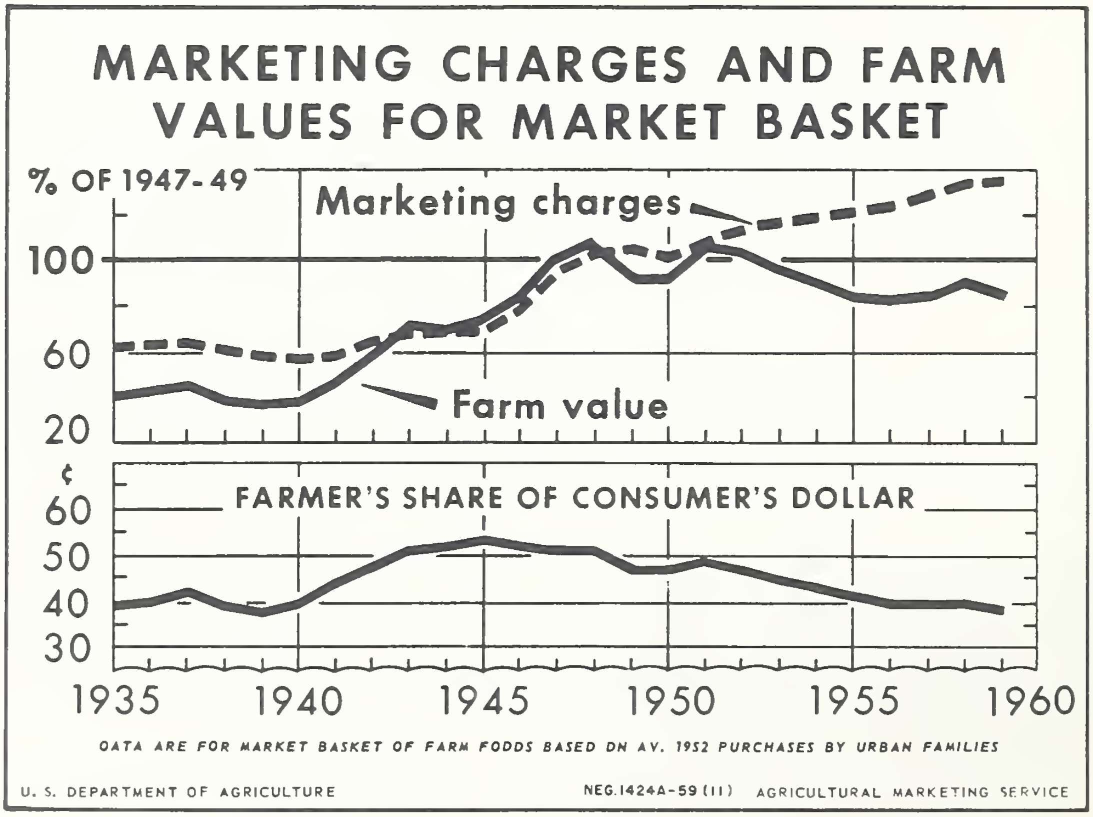


Figure 2

Table 1.--The farm food market basket: Retail cost, farm value, farm-retail spread, and farmer's share of retail cost, 1947-60 1/

Year and month	Retail cost 2/	Farm value 3/	Farm-retail spread	Farmer's share
	Dollars	Dollars	Dollars	Percent
1947	911	467	444	51
1948	982	497	485	51
1949	928	435	493	47
1947-49 average	940	466	474	50
1950	920	432	488	47
1951	1,024	497	527	49
1952	1,034	482	552	47
1953	1,003	445	558	44
1954	986	421	565	43
1955	969	395	574	41
1956	972	390	582	40
1957	1,007	401	606	40
1958	1,064	430	634	40
1959 4/	1,040	399	641	38
1958				
Jan.	1,042	427	615	41
Feb.	1,049	432	617	41
Mar.	1,075	458	617	43
Apr.	1,085	453	632	42
May	1,086	446	640	41
June	1,084	438	646	40
July	1,080	427	653	40
Aug.	1,066	420	646	39
Sept.	1,060	423	637	40
Oct.	1,053	414	639	39
Nov.	1,049	413	636	39
Dec.	1,042	405	637	39
1959 4/				
Jan.	1,048	412	636	39
Feb.	1,042	408	634	39
Mar.	1,036	408	628	39
Apr.	1,037	407	630	39
May	1,035	401	634	39
June	1,050	402	648	38
July	1,052	394	658	37
Aug.	1,039	396	643	38
Sept.	1,043	399	644	38
Oct.	1,037	391	646	38
Nov.	1,030	386	644	37
Dec.	1,032	383	649	37
1960				
Jan. 4/	1,030	386	644	38

1/ The farmer's share and index numbers of the retail cost, farm value, and farm-retail spread for the year 1913-56 are published in "Farm-Retail Spreads for Food Products," U. S. Dept. Agr. Misc. Pub. 741, 1957.

2/ Retail cost of average quantities of farm foods purchased per urban wage-earner and clerical-worker family in 1952, calculated from retail prices collected by the Bureau of Labor Statistics.

3/ Payment to farmers for equivalent quantities of farm produce minus imputed value of byproducts obtained in processing.

4/ Preliminary estimates.

Labor

Labor costs in the processing, wholesaling, and retailing of food products amount to almost half of the food marketing bill. Thus, the continued rise in average hourly earnings of food marketing employees is a major factor in the upward pressure on marketing spreads. Hourly earnings of employees of food processing, wholesaling, and retailing firms averaged about $2.06 in 1959, compared with $1.98 in 1958, and an average of $1.20 in 1947-49. In addition, food marketing firms in 1959 paid supplements to wages and salaries, including employers' contributions to pension, health, and welfare funds, as well as a few minor items, which amounted to an additional 5 percent of labor costs. These fringe benefits have been increasing at a more rapid rate in recent years than have wage rates.

Output per employee man-hour continued to increase in most segments of processing agricultural products. The number of production workers in processing food products has continued to decline, although the number of administrative, clerical, sales, and professional employees in food processing firms has increased. Increases in labor productivity have had a significant effect in keeping unit labor costs from increasing at a faster rate.

Advertising

Advertising costs are a significant item in the food marketing bill. The Agricultural Marketing Service initiated work during the last year on the amount and effect of advertising on the costs of marketing food products and returns to farmers. Advertising expenditures reported by food marketing corporations increased from $398 million in 1947 to $1,038 million in 1957, the latest year for which data are available (table 2). 1/ This increase of more than 2 1/2 times in advertising expenditures was considerably greater than the increase in the overall marketing bill. It is likely that in the last 2 years advertising expenditures have continued to rise at a faster rate than the total marketing bill.

Total advertising expenditures have consistently been larger for food processing corporations than for food wholesaling or retailing corporations. This is partly because corporate firms do a larger part of food processing than of wholesaling or retailing. Advertising expenditures of retailers, however, have risen most rapidly in recent years. The proportion of retailing done by corporations has increased; there has been more advertising of retailer brands, and retailers are using trading stamps extensively in their advertising and promotional efforts.

1/ These estimates cover only corporations engaged in food manufacturing, wholesaling, and retailing, adjusted to eliminate expenditures for nonfood items. They do not include advertising expenditures by noncorporate firms, trade associations, producers' cooperatives, or other noncorporate organizations. The definition of advertising costs used in this study is the one developed by Internal Revenue Service for corporations reporting advertising as a tax deduction. Trading stamps and other promotional expenses are not always reported as advertising expenditures.

Table 2.--Expenditures for advertising food and kindred products by manufacturing, wholesaling, and retailing corporations, 1947-51 and 1953-57

Year	Type of firm				Percentage of total expenditures			
	Manufacturing	Wholesaling	Retailing	Total	Manufacturing	Wholesaling	Retailing	Total
	Million dollars	Million dollars	Million dollars	Million dollars	Percent	Percent	Percent	Percent
1947 ...	319.5	37.3	41.5	398.3	80	9	11	100
1948 ...	345.7	46.4	47.3	439.4	79	10	11	100
1949 ...	374.4	52.4	55.2	482.0	78	11	11	100
1950 ...	435.1	64.8	60.2	560.1	78	11	11	100
1951 ...	470.1	70.3	69.1	609.5	77	12	11	100
1/								
1953 ...	558.4	78.5	91.7	728.6	77	11	12	100
1954 ...	610.9	78.8	106.4	796.1	77	10	13	100
1955 ...	688.3	75.3	135.7	899.3	77	8	15	100
1956 ...	724.0	84.8	167.4	976.2	74	9	17	100
1957 ...	758.9	95.4	183.4	1,037.7	73	9	18	100

1/ Data for 1952 were not available.

Based on data obtained from Internal Revenue Service Source Book.

Taxes

Taxes are a substantial part of the marketing bill for food products. During 1959, the Agricultural Marketing Service also initiated research to determine the types and magnitude of taxes in marketing food products and to study the effects of taxes on market structure. In 1957, food marketing corporations paid almost $1.7 billion in taxes, an increase of about two-thirds over the $1.0 billion reported for 1947 (table 3). Taxes have increased at about the same rate as the marketing bill.

About three-fifths of these taxes were Federal income taxes. The remainder was other taxes--real estate and personal property taxes, social security, unemployment insurance, State income, and franchise taxes and license fees.

These estimates do not include retail sales taxes on food. The tax on retail food store sales of food items in 1957 probably amounted to around 400 million dollars. 2/

2/ This estimate is based on tax rates and Census sales data.

Table 3.--Taxes paid in marketing food products by processing, wholesaling, and retailing corporations, 1947-51 and 1953-57 1/

Year	Type of firm				Percentage of total taxes paid			
	Food processors	Wholesale food firms	Retail food stores	Total, all groups	Food processors	Wholesale food firms	Retail food stores	Total, all groups
	Million dollars	Million dollars	Million dollars	Million dollars	Percent	Percent	Percent	Percent
1947..	750.9	122.5	136.9	1,010.3	74	12	14	100
1948..	678.2	113.1	143.6	934.9	73	12	15	100
1949..	680.8	120.7	161.7	963.2	71	12	17	100
1950..	888.1	155.6	194.5	1,238.2	72	12	16	100
1951..	908.2	156.8	209.5	1,274.5	71	12	17	100
2/...								
1953..	986.7	152.3	266.0	1,405.0	70	11	19	100
1954..	950.1	152.1	280.2	1,382.4	69	11	20	100
1955..	1,094.0	166.2	315.5	1,575.7	69	11	20	100
1956..	1,091.4	178.7	360.4	1,630.5	67	11	22	100
1957..	1,088.1	184.1	385.0	1,657.2	66	11	23	100

1/ Total taxes include Federal income taxes, excess profits taxes where applicable, and "taxes paid." The latter category consists principally of taxes on real estate, personal property, social security, unemployment insurance, State income, franchise taxes, and license fees. Total taxes paid by these corporations have been adjusted to allow for beverages and nonfood products processed or handled.

2/ Data for 1952 were not available.

Based on data from the Internal Revenue Service Source Book.

Also, the data in table 3 do not include taxes paid by noncorporate food marketing firms. Taxes paid by noncorporate firms probably were somewhat below a half billion dollars in 1957. 3/

Thus, taxes paid by food marketing firms and retail sales taxes probably totaled about two and a half billion dollars or close to 10 percent of the marketing bill. This estimate does not, of course, cover taxes included in the cost of supplies or equipment bought by food companies or other indirect taxes.

3/ This estimate is based on the proportion of processing, wholesaling, and retailing performed by noncorporate firms and the assumption that the owners of these firms have lower average tax rates than those paid by corporations.

Profits

Profits of corporations manufacturing and distributing food were higher in 1959 than in 1958, according to preliminary reports. Manufacturers' profits rose substantially after decreasing in 1958. For the first three quarters of 1959, profits (after taxes) of food processing corporations totaled \$930 million, compared with \$821 million in the same period of 1958. 4/ Many retail food chains have reported higher profits in 1959 than in comparable periods of 1958.

MORE AND BETTER FOOD AT LESS COST

Prices of food, the largest item in most urban family budgets, have received much public attention during recent years. Because consumers normally associate high prices with short supplies and low prices with abundant supplies, it is difficult for them to understand why food prices have risen despite generally abundant supplies at the farm level. Several salient points regarding this situation should be noted. First, as shown in figure 1, food prices have risen much less in the post-World War II period than the average of all consumer prices. Overall food prices have declined in several years in contrast to the continuing rise in prices of housing, transportation, medical care, and other services. Retail prices of some foods are lower than they were a decade earlier. Also, any rises in food prices are attributable to increased marketing spreads rather than higher prices to farmers, as the prices received by farmers for all products are generally lower.

Wage rates and consumer incomes have risen steadily in the postwar period, so that the cost of food to consumers in terms of hours of pay has declined substantially. Figure 3 shows the retail-store cost of the foods in the market basket converted into the hours of labor required to buy the market-basket foods. Wage earners had to work only about three-fourths as many hours to pay for the market basket of farm foods in 1959 as in 1947-49, although the dollar cost of these foods had risen 11 percent. In 1959, factory workers on the average could buy the market-basket foods with the pay checks (less withholding taxes) received for about 525 hours compared with about 725 hours in 1947-49. 5/ Thus, their pay for 200 hours was available for nonfood purchases or increased expenditures for food. For some families, it has meant "upgrading" their diets through buying more meats, more "expensive" out-of-season foods, and foods with more built-in maid services that save kitchen-preparation time for homemakers.

4/ Computed from "Quarterly Financial Report for Manufacturing Corporations," published by Federal Trade Commission and Securities and Exchange Commission.

5/ The market basket contains only the average quantities of farm-produced food products purchased for consumption at home per urban wage-earner and clerical-worker family in 1952. It does not include imported foods or nonfarm food such as bananas, pineapple, coffee, and fish. It does not include foods purchased in the form of restaurant meals. Therefore, expenditures for foods in the market basket do not represent all expenditures for food made by these families.

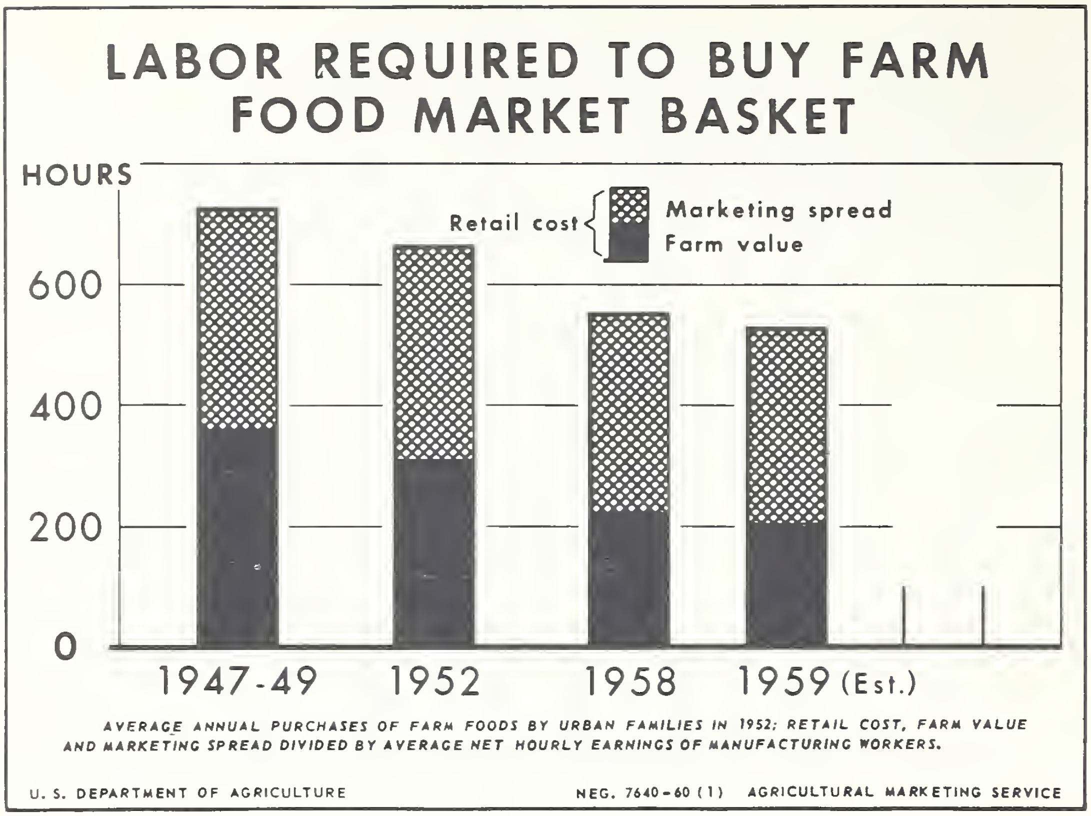


Figure 3

Higher wage rates and lower prices to farmers are the principal factors lowering "real" costs of food to urban consumers. Net hourly earnings of manufacturing workers increased from $1.30 in 1947-49 to an estimated $2.00 in 1959, an increase of over 50 percent. The "farm value"--the farmers' returns from the market-basket foods--dropped from $466 in 1947-49 to $399 in 1959, a decrease of 14 percent. As a result of higher wages and lower prices to farmers, the average number of hours of the wage earners' pay going to farmers for producing the foods in the market basket declined by close to 50 percent between 1947-49 and 1959.

Dollar marketing charges were 35 percent higher last year than in 1947-49. Despite this rise, the hours required to pay marketing charges also decreased--by 12 percent--but this decrease was much smaller than for farm production.

Greater efficiency in both the production and marketing of food products has made it possible for consumers to buy more and better foods with a smaller proportion of their incomes. Food expenditures took 21 percent of disposable income in 1959, a substantial drop from the postwar high of 27 percent in 1947. Widely recognized are the gains in production efficiency achieved through mechanization, improved crop varieties, and improved feeding efficiency in livestock. Not as well known nor as spectacular are the gains achieved in the efficiency of providing the marketing services required to move food products from the farm to the consumer's dinner table. Marketing spreads have increased, but not as fast as wage rates of labor, or prices of other services and supplies bought by marketing firms. For example, the increase in actual labor costs per unit of food product marketed in the last decade was only about half as large as the rise in hourly earnings. Unit labor costs rose less because the output per man-hour increased. Large investments in new plant and equipment and greater emphasis on marketing research, both public and private, apparently accelerated gains in labor productivity in the 1950's over the moderate gains during World War II and the immediate postwar period (fig. 4).

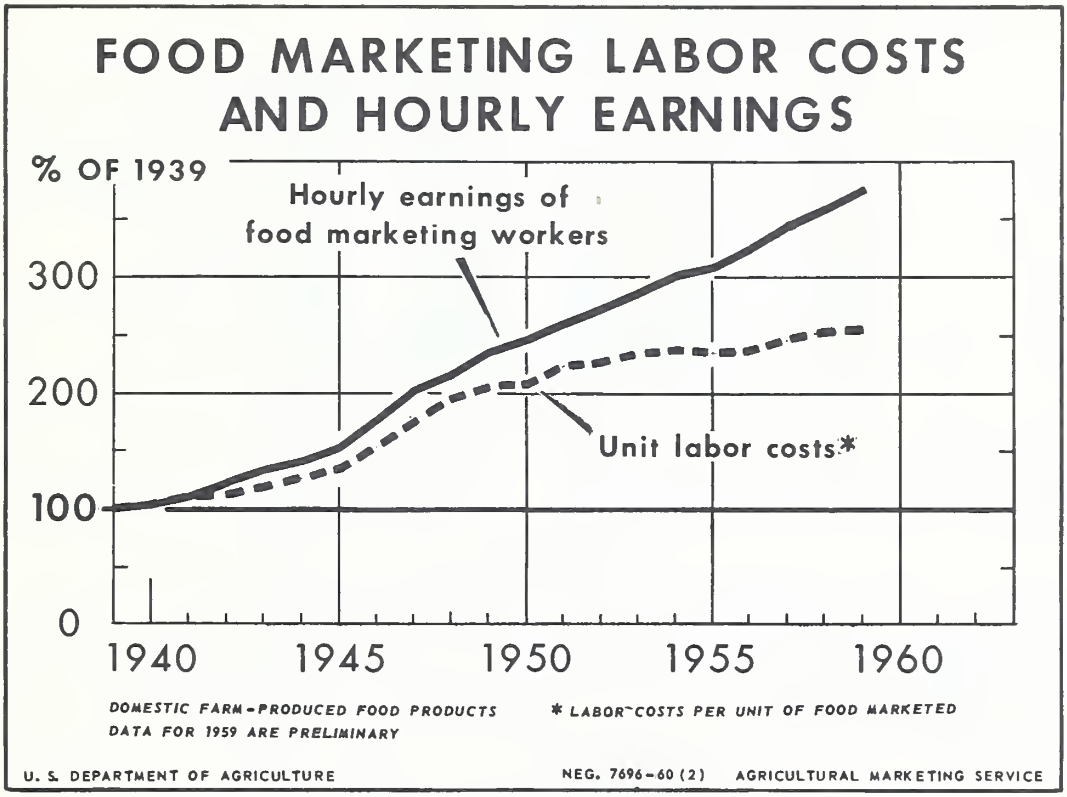


Figure 4

The increased efficiency of our food marketing system can be illustrated in yet another way. The volume of food moved through the marketing system increased by about a fourth in the last decade, but the number of persons required increased by only about 10 percent despite many additional services not fully reflected by the increase in volume.

Improvements in marketing efficiency vary markedly between groups of food products. As a result, trends in marketing spreads also vary. The next section reviews and summarizes trends in costs, services, and efficiency in marketing individual products and product groups. The data presented were obtained through special price spread studies in the Agricultural Marketing Service.

Bread

Retail prices of a 1-pound loaf of white bread averaged 19.7 cents in 1959, 0.4 cent higher than in 1958. However, marketing charges rose by 0.6 cent while the payments to farmers for ingredients used in a loaf of bread declined from 3.0 cents to 2.8 cents. The farmer's share of the retail price was 14 percent for all ingredients and 12 percent for the wheat.

The rise in retail prices of white bread in 1959 continued the steady increase of the last 10 years. As shown in figure 5, the increase in spreads between farm and retail prices closely paralleled the increase in retail prices. Changes in the farm prices of wheat and other ingredients used in bread (farm value in fig. 5) have had little or no effect on retail prices.

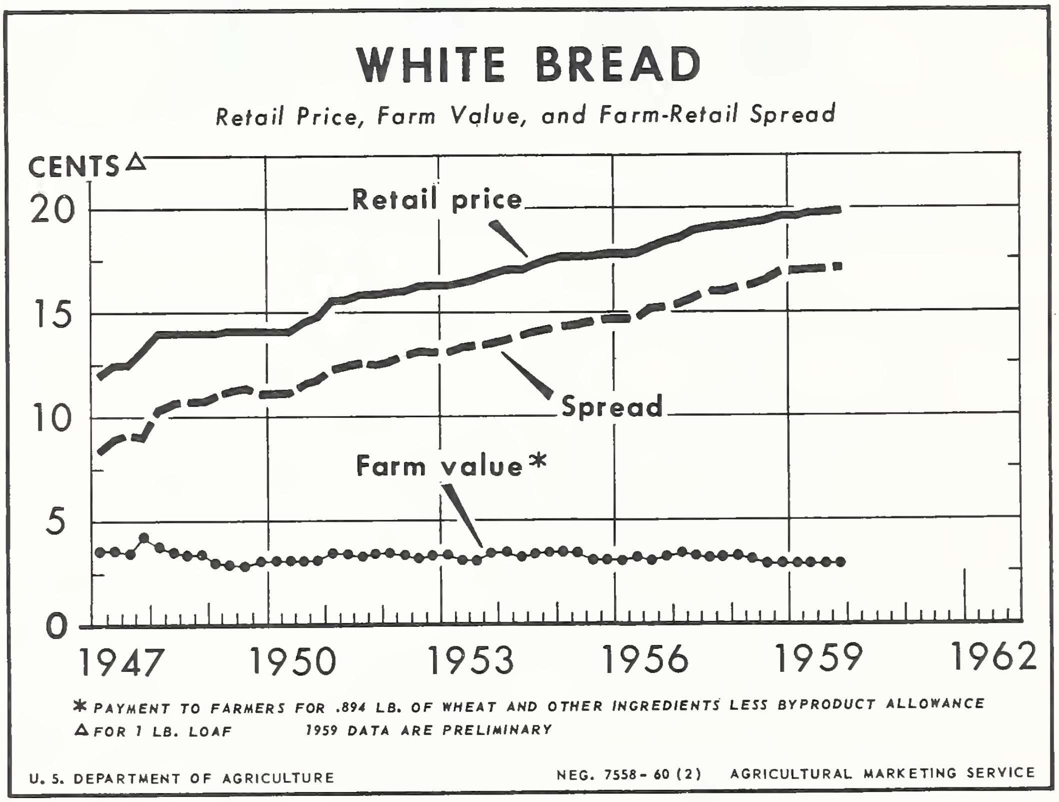
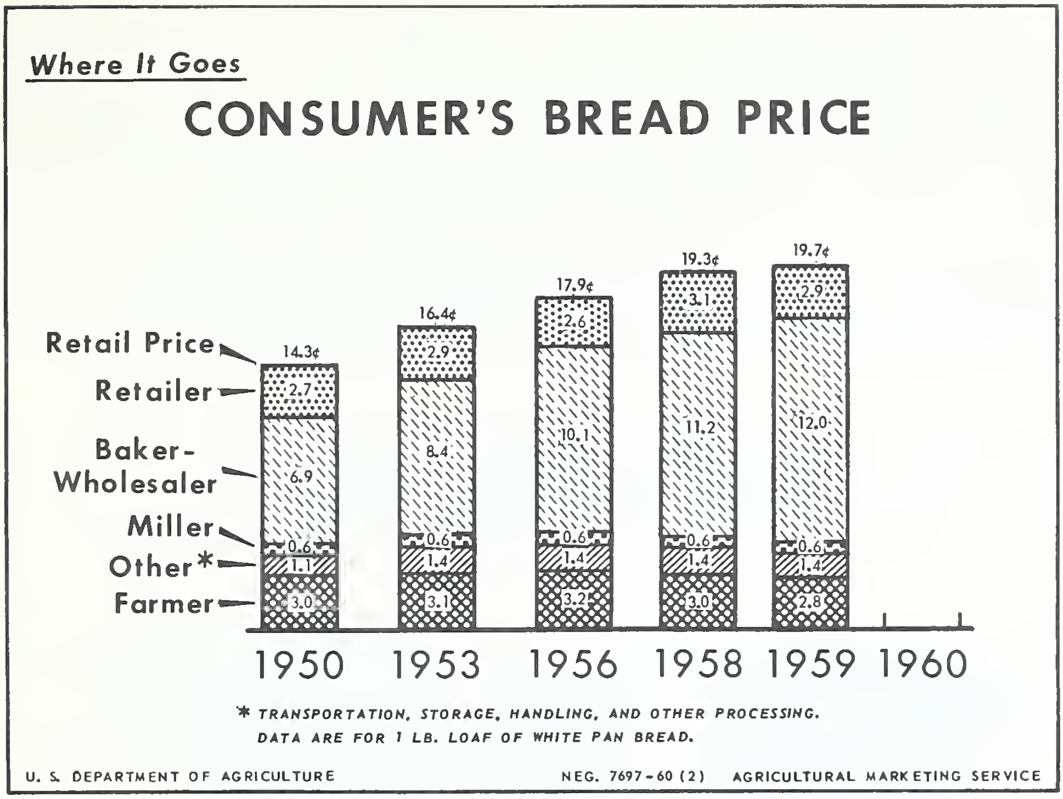


Figure 5

The wholesale price for a 1-pound loaf of white bread increased from 11.6 cents in 1950 to a new high of 16.8 cents for 1959. Of this 5.2 cents increase, 5.1 cents may be accounted for through increases in the baker-wholesaler margin (fig. 6). The widening of this margin may be attributed largely to higher costs in the baking and wholesaling operations, excluding ingredient costs. Rises in wage rates, salaries, and commissions were responsible for much of the increase.



* TRANSPORTATION, STORAGE, HANDLING, AND OTHER PROCESSING.
DATA ARE FOR 1 LB. LOAF OF WHITE PAN BREAD.

U. S. DEPARTMENT OF AGRICULTURE NEG. 7697-60 (2) AGRICULTURAL MARKETING SERVICE

Figure 6

The baker-wholesaler margin widened by 0.8 cent from 11.2 cents in 1958 to 12.0 cents in 1959. In 1959 this margin amounted to 61 percent of the retail price of a 1-pound loaf, compared with 58 percent in 1958.

The average retail margin for 1959 was 2.9 cents. This is 0.2 cent less than the annual average for 1958. From 3.1 cents in the first quarter, the retail margin declined to 2.8 cents in the last quarter.

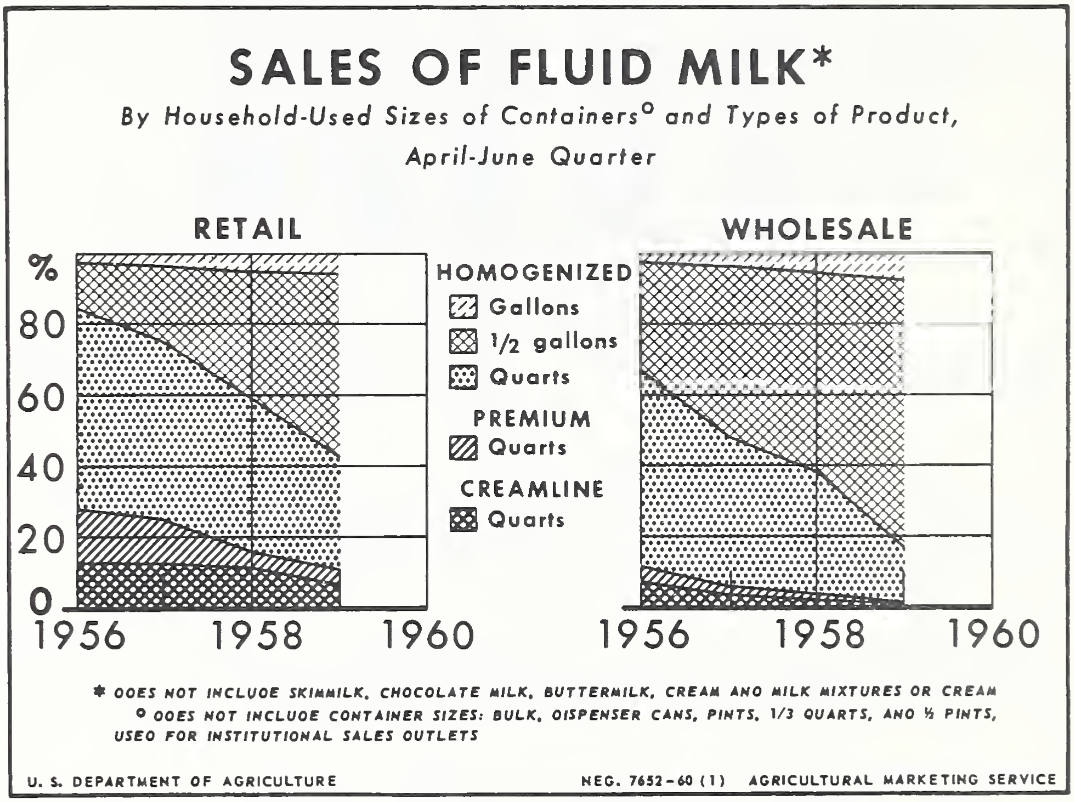
For the tenth consecutive year, the miller margin for the flour used in a 1-pound loaf of white bread remained at about 0.6 cent.

Handling, storage, transportation, and other processing charges remained unchanged at 1.4 cents per loaf equivalent in 1959.

Dairy Products

Fluid milk.--Retail prices for single quarts of fluid milk averaged 24.7 cents in 1959, an increase of 0.2 cent over 1958. This was the smallest increase since 1955. Farmers received 10.7 cents of the retail price in 1959, the same as a year earlier. The marketing margin rose from 13.8 cents in 1958 to 14.0 cents in 1959, the smallest increase in the last 10 years.

The AMS study of the operations of 80 representative fluid milk processing and distributing firms indicates that the average price paid by consumers for all fluid milk decreased during the last 4 years. Prices of milk in each of the individual types and sizes of containers have increased, but these increases have been more than offset by (1) shifts to larger multiple-quart containers which usually sell at lower prices per quart than single-quart containers; (2) movement of sales away from premium-priced milk; and (3) the continued shift from home delivery to store sales, for which prices paid by customers are usually lower than for home delivery sales (fig. 7). These shifts in the marketing of milk have brought about average per-quart prices paid by consumers that probably were about 0.5 cent lower in 1959 than in 1956.



* DOES NOT INCLUDE SKIMMILK, CHOCOLATE MILK, BUTTERMILK, CREAM AND MILK MIXTURES OR CREAM

° DOES NOT INCLUDE CONTAINER SIZES: BULK, DISPENSER CANS, PINTS, 1/3 QUARTS, AND ½ PINTS, USED FOR INSTITUTIONAL SALES OUTLETS

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Figure 7

The slight downward trend of prices also is reflected in the unit value of product sold by fluid milk distributors. Sales value per 100 pounds of milk processed was $11.22 in 1956, $11.15 in 1957, $11.05 in 1958, and $11.07 in 1959.

Fluid milk distributors' total operating costs per 100 pounds of milk in 1959 remained at about the same level as last year. Costs for wages, salaries, and commissions rose about 3 percent. However, this was more than offset by slight decreases in costs for containers and depreciation. Other costs were unchanged. Raw material costs were slightly higher than in 1958. Net profits, before income taxes, per quart of milk sold increased from 0.71 cent in 1958 to 0.79 cent in 1959.

Detailed study of certain phases of the fluid milk distributors' operations indicates that the increases in unit costs during 1955-58 have developed chiefly in the delivery segment of the business. In the 4-year period, total operating costs increased about 7 percent; processing costs increased 1 percent; administrative costs, a very small part of the total, dropped slightly; but delivery costs increased 12.1 percent.

This study also showed that small firms (those with annual volumes of less than 15 million pounds of products sold) had higher costs than large firms (those with volumes of over 30 million pounds per year). Processing costs were 36 percent higher for the small firms; delivery costs were 7 percent higher.

The combination of these factors shows that improved technology has offset increasing cost rates in the processing function, but as yet has not been effective in the delivery function where labor is such a large part of the total costs. They also indicate that large firms are more likely to adopt improved technological methods.

Cheese.--Retail prices and marketing margins of American processed cheese increased in 1959, mainly because of the strength in the September-December market, but the annual average farm value was unchanged from 1958. Wholesale prices of Cheddar cheese (the raw material for American processed cheese) moved above support levels in September and, in December, were as much as 10 percent higher. This was the first time since 1952 that cheese prices were significantly higher than supports. The improved wholesale prices were reflected in higher retail prices and farm value.

Cheese production, at least in the major dairy area, tends to be highly integrated. A study of cheese produced in Wisconsin showed that none of 12 lots of cheese moved through independently-owned firms at each step. In one case, the following steps were integrated within a cooperative firm: Production of milk, manufacturing, assembling, processing, wholesaling, and jobbing. Assembling-wholesaling-jobbing and jobbing-retailing were frequent combinations of functions. In no case was any marketing function carried on exclusively by independent firms.

This study also indicated that degree of integration was not an important factor influencing returns to farmers, marketing charges, or retail prices. The important factor was the type of retail outlet and the type of package (fig. 8). Margins tended to be higher in small independent retail stores than in supermarkets, and higher for cheese sold in small packages sliced than in larger packages unsliced.

Butter.--The retail price for butter averaged 75.2 cents in 1959, 1 cent higher than in 1958. However, prices moved up substantially during the last 4 months of 1959. In December, the retail price reached 78.5 cents, more than 4.0 cents higher than in December 1958. About half of this higher price was reflected in the farm value for butter, which was 53.9 cents in December 1959 compared with 51.9 cents a year earlier. The other half of the increase was in the marketing margin. The wholesale-retail margin in December 1959 averaged 16.6 cents, up 2.1 cents from a year earlier; the farm-wholesale spread was 7.7 cents, down 0.7 cent from a year earlier.

The improved prices for butter and, to a lesser extent, for cheese, reflect the fact that these products are residual uses for milk. The total production of milk in 1959 was down slightly from 1958. However, due primarily to population increase, more milk was utilized in higher value uses, particularly as fluid milk. As a consequence, the amount of milk used for butter and cheese dropped by 4 percent.

Nonfat dry milk.--Retail prices of instant nonfat dry milk rose slightly to 47.3 cents per pound in 1959, based on prices collected through cooperation with the Bureau of Labor Statistics. The average farm value dropped slightly, and the marketing margin rose 0.6 cent to 40.2 cents.

Most nonfat dry milk for household use is distributed under the private brands of a relatively few firms. Information obtained in a study of the costs of processing and distributing instant nonfat dry milk shows that heavy promotion and advertising costs are involved in developing and retaining a market for private brands.

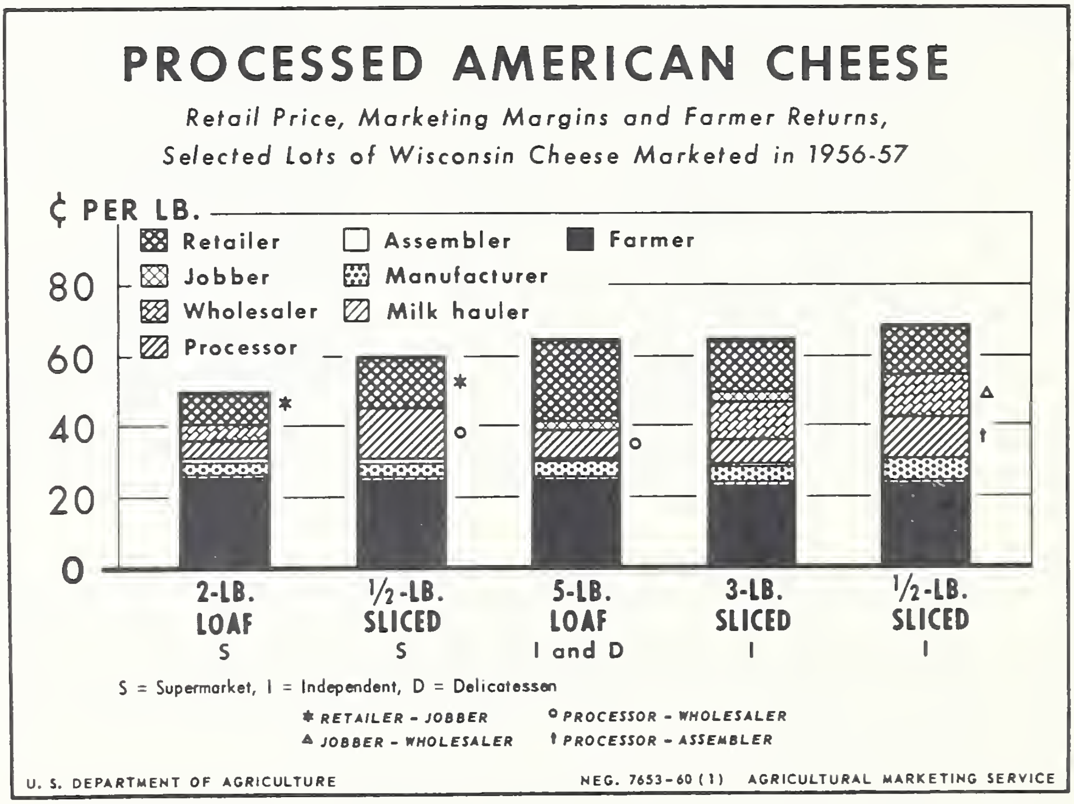


Figure 8

Fruits and Vegetables

Marketing margins and retail prices of fruits and vegetables in the market basket averaged lower in 1959 than in 1958. These decreases followed sharp increases in 1958. In 1959, marketing margins for all fruits and vegetables averaged 32 percent higher than in 1947-49; retail prices were up 25 percent; and prices received by farmers were up 11 percent.

For fresh fruits and vegetables, the retail cost, farm value, and marketing margin decreased in 1959 from the peak levels reached in 1958. Unfavorable weather late in 1957 and early in 1958 reduced the supply of some fresh products, and sharp increases in prices and marketing margins followed. Much of the decrease in the farm value and retail cost of the fresh fruits and vegetables group in 1959 was caused by decreases in prices for oranges. The decrease in the marketing margin for fresh fruits and vegetables was the first decrease since 1954. The marketing margin for fresh fruits and vegetables in 1959 was 44 percent above the 1947-49 average, while the farm value had increased by 6 percent (fig. 9).

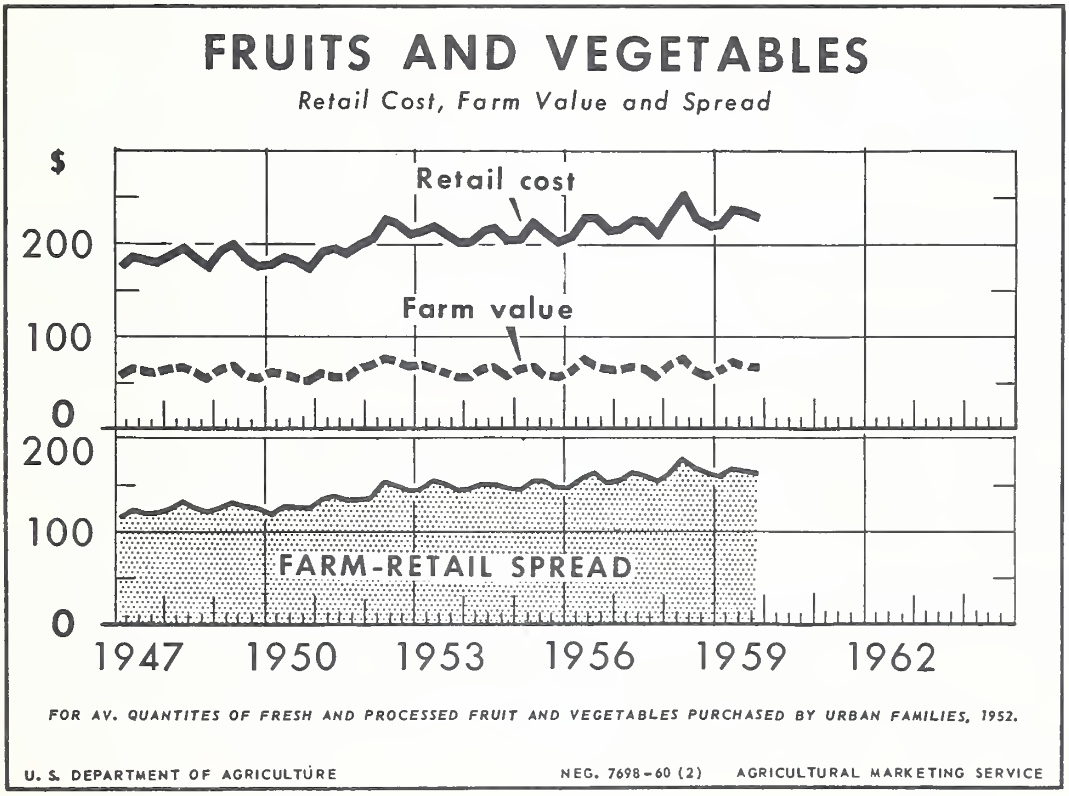


Figure 9

Marketing margins for processed fruits and vegetables in the market basket decreased 2 percent from 1958 to 1959 (table 4). Farm values in 1959 increased relatively more than retail prices. Farm values of frozen concentrated and canned orange juice were up sharply from 1958 levels. Marketing margins for processed fruits and vegetables in the market basket have not increased as much in recent years as those for the fresh products. The marketing margin for processed products was 6 percent higher in 1959 than in 1953 (the first year for which data are published) and for fresh products was 14 percent higher.

Table 4.--Change in retail cost, farm value, and farm-to-retail spread for fruits and vegetables in the market basket, 1959 compared with 1958 and 1947-49

Item	Retail cost	Farm value	Farm-to-retail spread
	Percent	Percent	Percent
Market basket			
1959 over 1958	-2	-7	+1
1959 over 1947-49	+11	-14	+35
All fruits and vegetables			
1959 over 1958	-1	+2	-2
1959 over 1947-49	+25	+11	+32
Fresh fruits and vegetables			
1959 over 1958	-4	-8	-3
1959 over 1947-49	+28	+6	+44
Processed fruits and vegetables			
1959 over 1958	+3	+28	-2
1959 over 1947-49	1/	1/	1/

1/ Not available prior to 1953.

Appalachian apples.--Several studies of the cost and economic efficiency of handling and packing operations have provided a better understanding of some of the cost components of the marketing margin for specific fruits and vegetables. A study of costs and efficiency in handling and packing apples grown in the Appalachian area has suggested the most efficient methods and equipment in current use. During the 1957-58 season, packing costs by type of container were:

Container	Cost per container
Tray-pack carton	$1.11
Northwest box	1.20
Twelve 4-pound bags (in master container)	1.13
Nine 5-pound bags (in master container)	.93

Potatoes.--Studies of the cost of handling and packing early-crop potatoes in Florida and Alabama showed the additional cost of packing potatoes in 10-pound bags rather than 100-pound sacks (labor, materials, equipment, and extra potatoes) ranged from about 92 cents for an annual volume of 2,500 hundredweight to 57 cents for an annual volume of 40,000 hundredweight. Previous research showed the cost of packing early-crop potatoes in Florida and Alabama to vary between producing areas and by type of container as follows:

Area and container	Packing cost Cents per 100 pounds
South Florida area	
50-pound bag	51
Hastings area	
50-pound bag	46
100-pound bag	36
Alabama	
50-pound bag	55
100-pound bag	43

South Carolina peaches.--The division of the retail price for South Carolina peaches sold in New York City among marketing agencies and producers was derived from a study of handling and packing operations for South Carolina peaches and from data collected regularly for several fruits and vegetables at various points in the marketing system (fig. 10). During the second week of July 1959, South Carolina peach growers received an average on-tree return of $2.35 per bushel for peaches shipped to New York City. The f.o.b. shipping point price averaged $3.85 per bushel, which included the cost of container, picking, packing, and other shipping-point charges. In New York City, the wholesale selling price averaged $5.75, and the retail price averaged $8.78 per bushel.

As the marketing season progressed, supplies of peaches increased and prices declined at all levels. Marketing margins between wholesale prices and f.o.b. shipping-point prices declined proportionately less than did f.o.b. shipping-point prices. During the latter part of the season, the f.o.b. price at shipping point ranged from $2.50 to $3.00. Picking, packing, and container costs averaged about $1.50, resulting in on-tree returns to growers of from $1.00 to $1.50 per bushel.

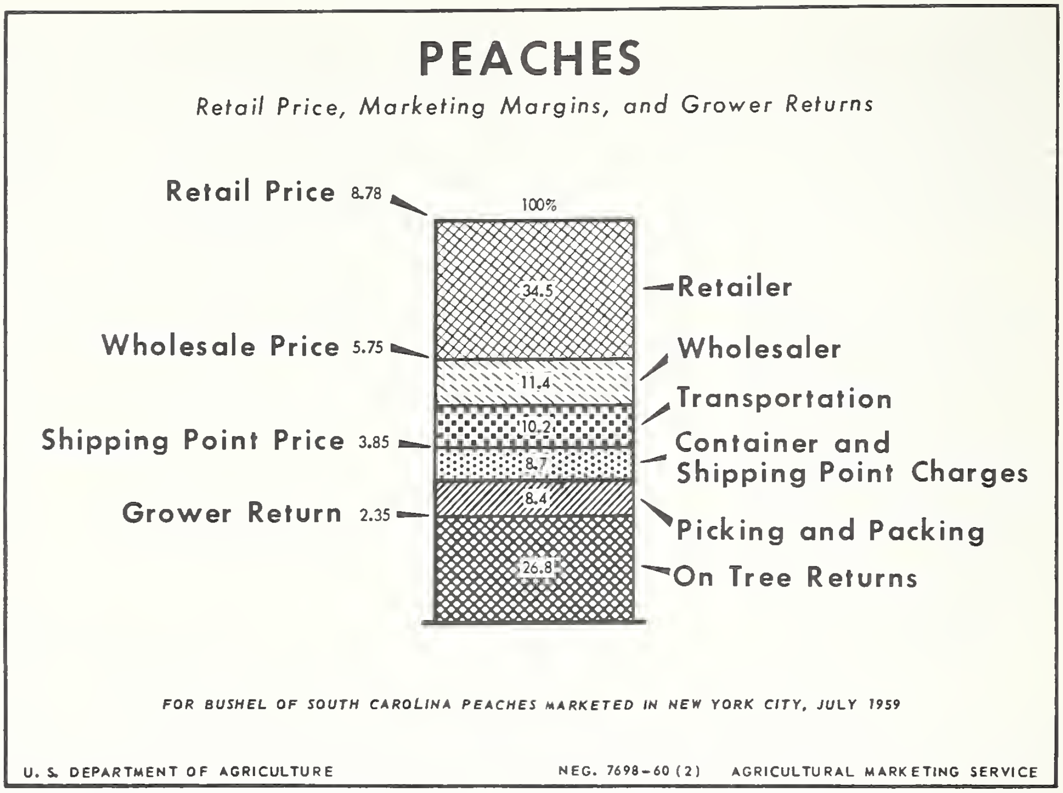


Figure 10

Livestock

Farm-retail price spreads for beef, pork, and lamb continued to rise in 1959, as they have in most recent years. In 1959, farm-retail spreads for U.S. Choice grade beef averaged 31.7 cents per pound (retail weight), 1.5 cents higher than in 1958. Price spreads for pork rose 1.9 cents and for lamb, 1.1 cents. Most of the increases in these spreads between 1958 and 1959 were caused by higher wholesale-retail spreads.

In contrast to bread prices, farm and retail prices for meat products tend to move together more closely than retail prices and farm-retail spreads (figs. 11 and 12). However, the continued increase in spreads for meat products has resulted in a rise in retail prices relative to farm values and a marked decrease in the farmer's share of the consumer's meat dollar. For example, the retail price of pork cuts averaged 57.2 cents in 1959, about the same as in 1952. But the farm value (equivalent to 1 pound of retail cuts) was only 27.4 cents compared with 34.1 cents in 1952. Thus, a drop of 20 percent in returns to farmers between 1952 and 1959 was absorbed by the increase in the marketing spread, and the farmer's share of the retail price dropped from 59 percent to 48 percent.

The increase in price spreads for beef also has depressed farm prices sharply in relation to retail prices. Retail prices for U.S. Choice grade beef

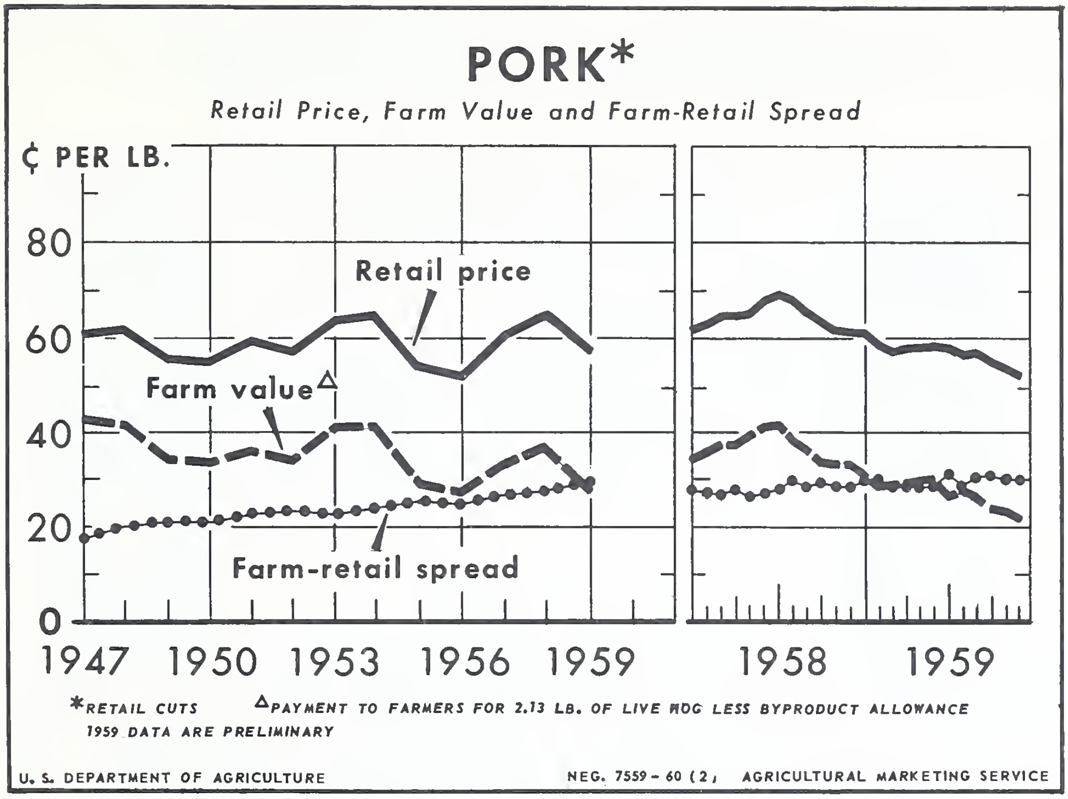


Figure 11

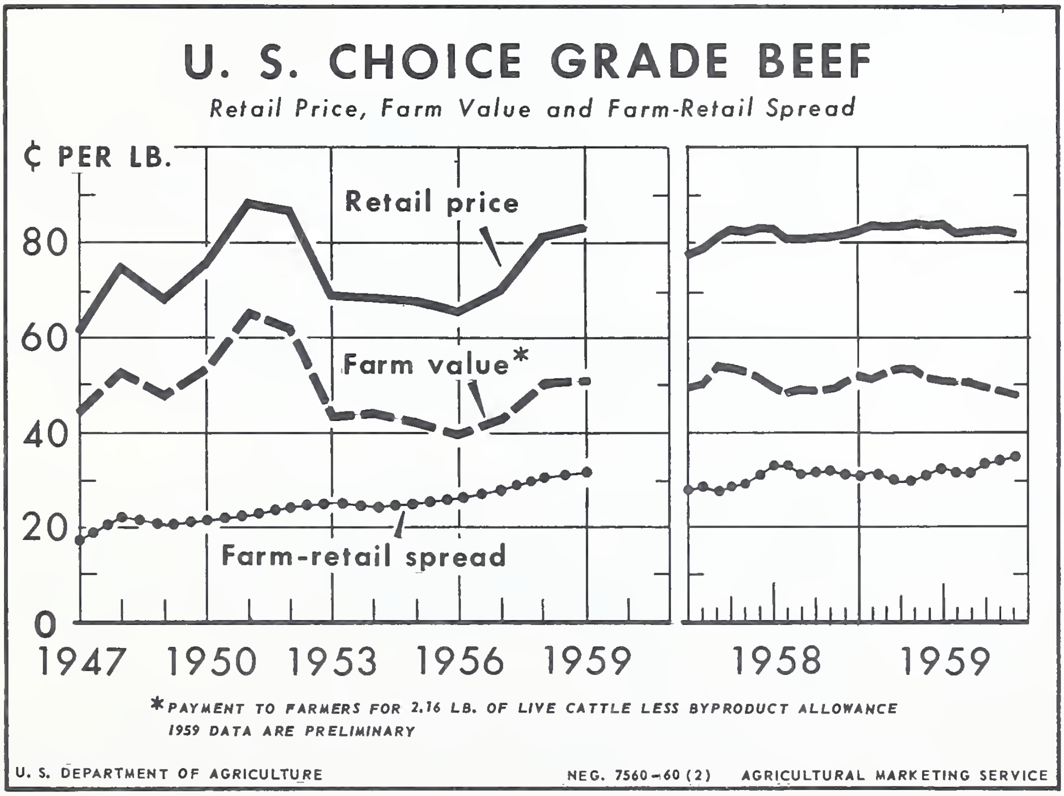


Figure 12

in 1959 were near the high levels of 1952, but farm-retail spreads were 32 percent wider than in 1952 and farm values almost 20 percent lower. The farmer's share was down from 72 percent in 1952 to 62 percent in 1959.

In recent years, the AMS has published reports on several studies of different phases of selected segments of the complex marketing system for livestock and meat. A bulletin combining and coordinating the information contained in these numerous reports will be published in the near future. The objective of this bulletin is to present a more complete picture of different agencies utilized, services rendered, and costs and margins associated with the processing and distribution of livestock and meat. Operating cost data and information concerning factors affecting operating efficiency in meatpacking are being collected. This information, along with costs and margins data, will provide a framework in which further analysis can be made in delineating areas where increased efficiencies and reduced costs may be possible in marketing livestock and meat.

Poultry and Eggs

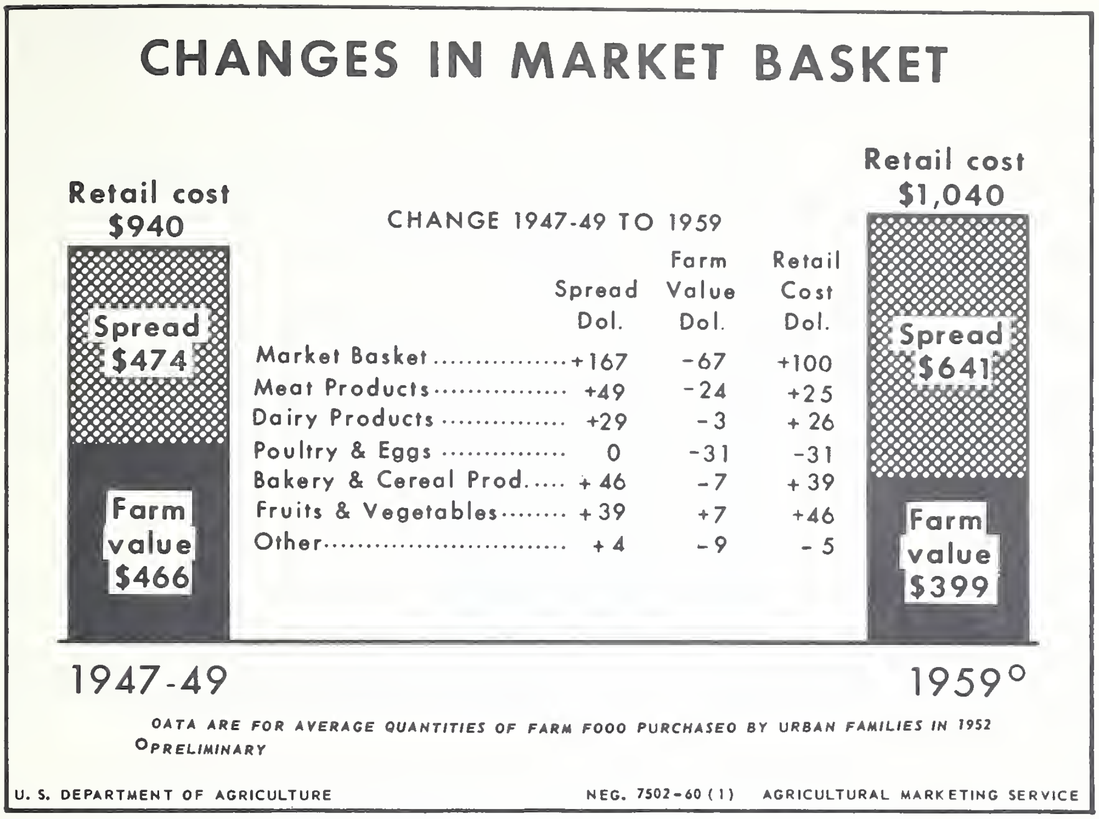
Poultry and eggs are the only major group of food products on which farm-retail price spreads have not increased since 1947-49 (fig. 13). Farm-retail spreads on frying chickens averaged 0.7 cent a pound, lower in 1959 than in 1958, while the average gross spread on eggs was 0.6 cent per dozen. Both farm and retail prices of fryers and eggs fell in 1959 and were at their lowest levels in more than 10 years. Major factors contributing to these price declines include: (1) Increases in production and marketable supplies, with resulting increases in interregional competition; (2) changes in the organization of production and marketing operations; and (3) basic trends toward higher efficiency in all segments of the industry.

Eggs.--Farm-retail price spreads on eggs varied within the relatively narrow range of 17.8 to 20.4 cents a dozen from 1949 to 1959. They averaged 19.0 cents a dozen in 1959. Farm values and retail prices moved up and down sharply, but almost together, and both declined 7.4 cents a dozen from 1958 to 1959 (fig. 14). The decrease in farmer's share of the retail price to 63 percent was a drop of 5 percentage points from 1958.

In general, farm-to-retail spreads on Grade A large eggs in 9 major cities remained about the same in 1959 as in 1958, but they averaged more than a cent a dozen higher than in 1957. Retail store spreads of 9.8 cents a dozen in 1959 were 1.5 cents wider than in 1957 (fig. 15).

Variations in annual average spreads among individual cities may differ widely from the average changes for the 9 cities. For example, from 1957 to 1959, farm-retail spreads on Grade A large eggs increased 3 cents a dozen in Los Angeles but decreased 0.6 cent a dozen in Chicago. These changes may have resulted in part from shifts in retail store pricing policies with respect to differentials among grades and sizes.

Farm-retail spreads in Los Angeles and San Francisco continue to be among the lowest in the 9 cities, although these spreads have been widening since 1956. Margins in St. Louis have narrowed since 1956, and were lower than those



CHANGE 1947-49 TO 1959

	Spread Dol.	Farm Value Dol.	Retail Cost Dol.
Market Basket	+167	-67	+100
Meat Products	+49	-24	+25
Dairy Products	+29	-3	+ 26
Poultry & Eggs	0	-31	-31
Bakery & Cereal Prod.	+ 46	-7	+ 39
Fruits & Vegetables	+ 39	+7	+46
Other	+ 4	- 9	- 5

DATA ARE FOR AVERAGE QUANTITIES OF FARM FOOD PURCHASED BY URBAN FAMILIES IN 1952

°PRELIMINARY

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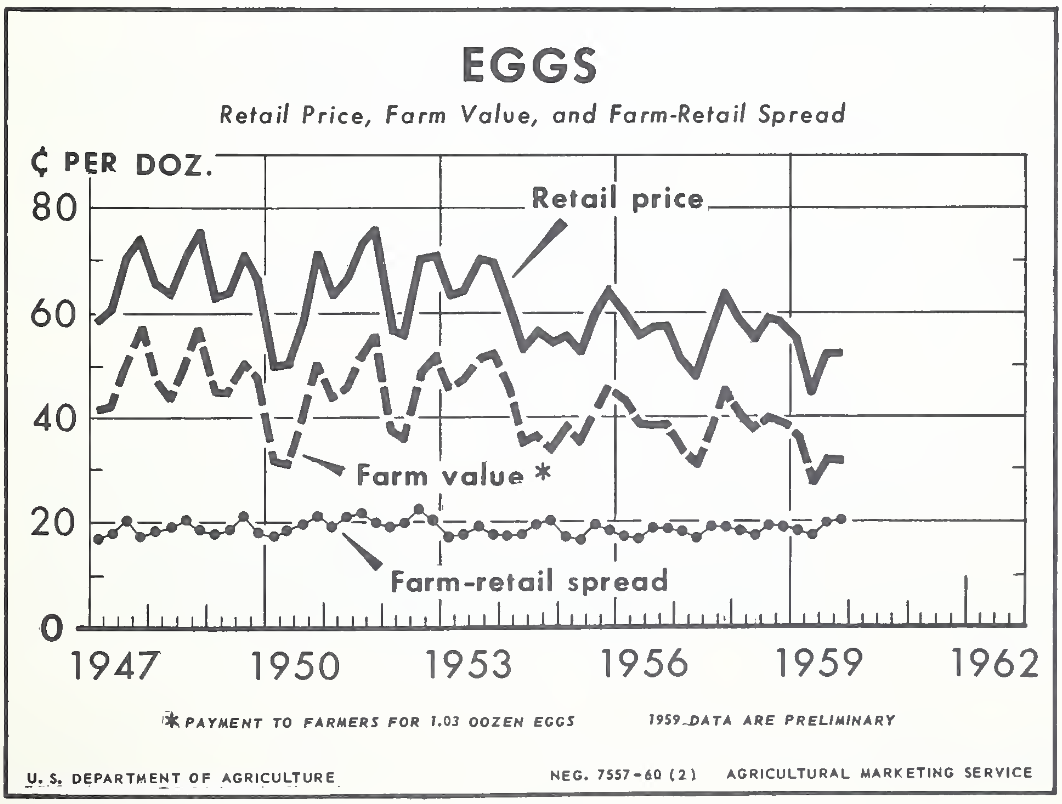
Figure 13



*PAYMENT TO FARMERS FOR 1.03 DOZEN EGGS 1959 DATA ARE PRELIMINARY

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Figure 14

in San Francisco in 1959. In all 3 of these cities, eggs move directly from farms to assembler-distributors and then to retailers. New York continues to have the highest farm-retail margins on eggs, probably because of its high retail store spreads and its comparatively roundabout distribution channels involving many marketing firms in the city with costly, nonmechanized handling procedures. It should be noted, however, that an increasing volume of eggs is moving into New York retail stores through more direct marketing channels similar to those prevalent in Los Angeles, San Francisco, and St. Louis.

The increasing tendency of large retail supermarkets and chainstore companies to purchase high-quality eggs, already candled and cartoned at point-of-production assembly plants for shipment directly to their stores, has resulted in substantial reductions in volumes of eggs handled by terminal market wholesalers. A recent study points out how it is possible to save as much as 6 cents a dozen through close coordination of egg production and marketing channels.

Frying chickens.--Farm-to-retail spreads of 20.0 cents a pound on ready-to-cook frying chickens in the United States in 1959 were the lowest recorded in nearly a decade (fig. 16). These spreads averaged 0.7 cent a pound lower than in 1958. Both equivalent farm values and prices paid by consumers for ready-to-cook fryers continued their long-time downward trends and averaged, respectively, 22.3 and 42.3 cents a pound.

All segments of the poultry and egg industries have been confronted with difficult problems of adjustment to less favorable price-cost ratios. The continued downward trend in farm-retail spreads has been due in part to continued efforts of marketing firms to survive during this period of low prices by reducing their profit margins, while trying to maintain or increase efficiency in their production and marketing processes.

In contrast with 39-cent retail price specials on frying chickens a couple of years ago, in 1959 specials of 29 cents a pound and lower became both common and popular in chainstores and independent supermarkets in many cities.

Turkeys.--Farm-retail price spreads for medium and large turkeys in the last quarter of 1959 averaged less than during the same period in 1958. The 1959 Christmas holiday prices averaged higher for all turkeys than prices during the Thanksgiving holidays, and higher than prices for the Christmas holidays in 1958.

One reason for higher Christmas turkey prices in 1959 was the smaller marketable supplies of birds. Factors affecting this smaller supply were: (1) Heavier than normal retail sales of turkeys during late summer and early fall because of widespread advertising of turkeys as special, low margin sales items; (2) heavy sales of turkeys during the Thanksgiving holidays, that further reduced cold storage holdings; and (3) a lower volume of turkeys slaughtered in the last quarter 1959 than in 1958, although hatching reports indicate farmers raised more turkeys during 1959 than in 1958.

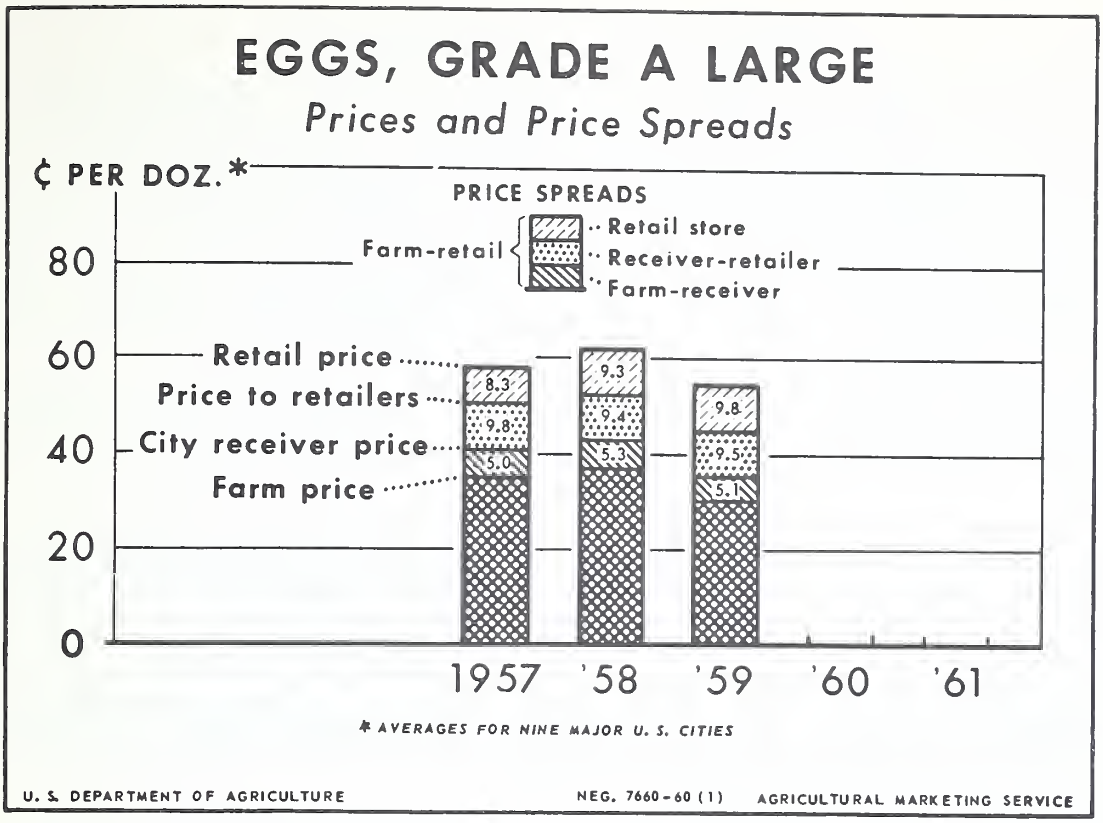


Figure 15

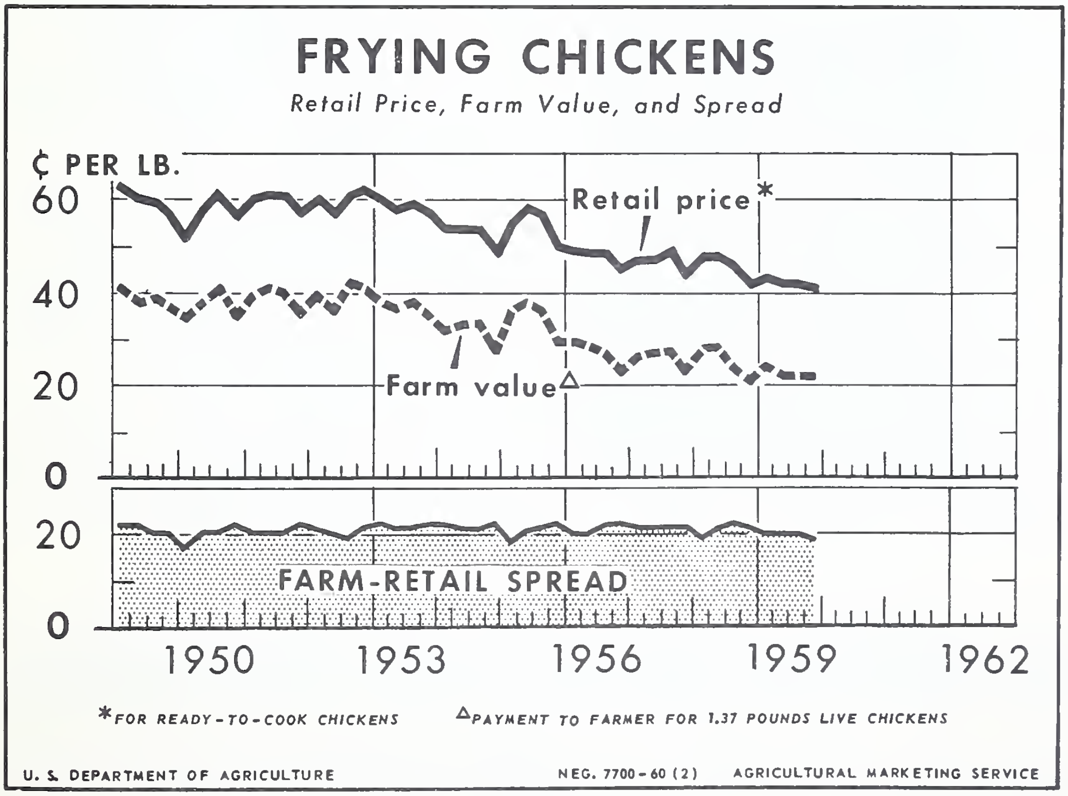


Figure 16

Vegetable and Animal Fats and Oils

A study of marketing practices affecting procurement and use of major vegetable oils indicates that there is substantial vertical integration in vegetable oil refining and manufacturing industries, though there is little indication of growing horizontal concentration. The shift from use of cottonseed oil to soybean oil, particularly in the manufacture of margarine and shortening, is affected by the frequent and relatively wide price spreads between these oils. Processors of salad dressing and cooking oils still prefer cottonseed oil, but even this preference is weakening. The relatively high cost of cottonseed oil reflects an inelastic demand in certain uses and a limited supply, caused by the decreased demand for cotton and the cotton acreage restriction program. These conditions have contributed to the strong incentive for commercial users to seek ways to make greater use of the lower cost oils.

A recent economic study of soybean processing indicates that between the 1952-53 and 1957-58 seasons, the volume of soybeans processed increased over 50 percent; the number of active soybean mills decreased from 174 to 110; and the rates paid by mills for wages, fuel, and power increased. Yet the average costs for processing soybeans by the solvent-extraction method decreased by approximately 25 percent. Because of larger volume and improved efficiency, most soybean mills now are able to operate profitably in spite of higher costs, and are able to pay higher prices for beans.

The most economic conditions for the storage of vegetable fats and oils varies with the size, kind, and location of commercial field tanks. In a controlled experiment, drums of cottonseed oil have been held under various conditions up to 5 years. A drum of oil without access to air at room temperature showed the least decrease in quality, according to objective analysis. Quality deterioration caused some oils to be discounted as much as 1 cent per pound under the market price. Most of the crude cottonseed oils stored in drums up to 3 years have shown decreases in value of as much as 15 percent, due generally to increase in color; however, there was little change in fat stability.

In a study of marketing margins for lard, estimates of charges made by marketing agencies were related to services they perform and to changes in prices of lard. The slaughter-to-retail margins for lard increased from 7.9 cents per pound in 1949 to 11.2 cents in 1958. Of the 3.3-cent increase, retail margins were up by 2.2 cents a pound and processor-wholesaler margins by 1.1 cents. Most of the fluctuations in margins for lard during the last 10 years appear to have resulted from changes in retail lard prices, with prices of hogs having little or no effect on lard prices. Since 1955, shortening manufacturers have purchased 13 to 17 percent of the annual lard production for use in their products. This has had a stabilizing effect on lard prices.

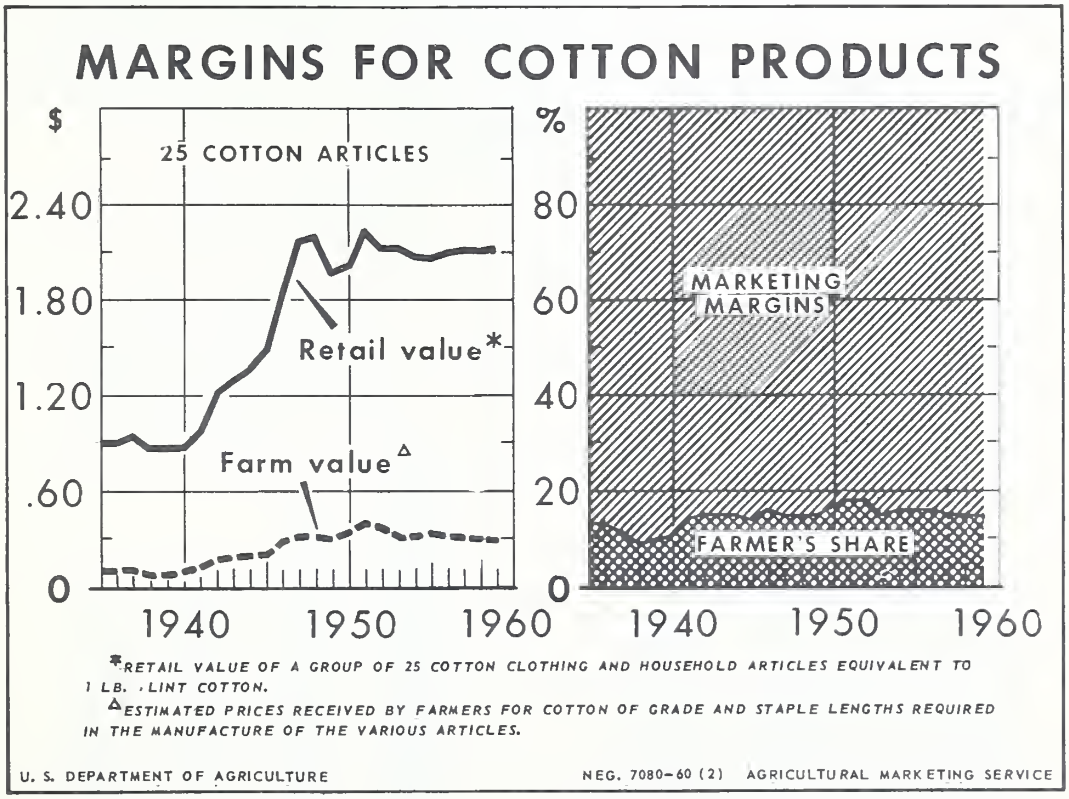
Cotton and Tobacco Products

Margin studies also were conducted for cotton and tobacco products, financed with regular funds. Some of the highlights of these studies are:

Cotton.--The spread between the retail cost of cotton products and the farm value of lint cotton used in their manufacture increased in 1959 but was still below the highs of the late 1940's. The sharp decline in cotton prices at the beginning of the 1959-60 season brought the farm value of lint cotton used in 25 representative items of cotton clothing and household furnishings to an average level of 30 cents per pound. At this level, the farm value was about 6 percent below that for the last 6 months of 1958 and about 25 percent below the record high of 1951. Retail cost for the equivalent of 1 pound of lint cotton averaged $2.14 during the last half of 1959, slightly higher than a year earlier, and about 5 percent below the 1951 peak. As a result of these changes, the farmer's share of the consumer's dollar averaged 14 percent in the last half of 1959, compared with 15 percent during the same period a year earlier and the high of 18 percent in 1951 and 1952 (fig. 17).

Prices received by mills for unfinished cotton cloth have risen steadily since the recent cyclical low reached in the second quarter of 1958. The increase in cloth prices and the decline in raw cotton prices have resulted in substantial increases in gross margins of textile manufacturers. Mill margins for manufacturers of 20 selected constructions averaged 49 percent of the value of unfinished cloth during August-December 1959. Although still below the levels attained in the late 1940's, this percentage was well above the average of 42 percent for the 1958-59 season and 40 percent for 1957-58.

Gross margins of retail dry goods stores generally have trended upward in recent years. Gross margins for merchandising raw cotton have risen moderately in recent years, reflecting increased charges for ginning, storage, compression, and other services.



*RETAIL VALUE OF A GROUP OF 25 COTTON CLOTHING AND HOUSEHOLD ARTICLES EQUIVALENT TO 1 LB. LINT COTTON.

ΔESTIMATED PRICES RECEIVED BY FARMERS FOR COTTON OF GRADE AND STAPLE LENGTHS REQUIRED IN THE MANUFACTURE OF THE VARIOUS ARTICLES.

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Figure 17

Manufacturing of cotton yarn and cloth and fabricating it into wearing apparel and household goods took more than 40 percent of the consumer's cotton dollar in 1957, the latest year for which data are available (fig. 18). Wholesaling and retailing of these products also took over 40 percent of the consumer's cotton dollar. Margins for ginning and baling, combined with those for all the services involved in taking cotton from gins and delivering it to mills, totaled less than 4 percent. The relative importance, from the viewpoint of costs, of increasing efficiency and of reducing margins for manufacturing and distributing cotton products is indicated by these data. A reduction of 10 percent in the combined manufacturing and distribution margins in 1957 would have amounted to about three-fifths of the gross returns to farmers for cotton and to about two and a half times the total costs of marketing the raw cotton, including ginning and baling.

Tobacco.--Price spreads for tobacco products are published regularly in the Marketing and Transportation Situation. The retail cost of tobacco products made from 1 pound of leaf tobacco increased from $3.62 in the 1957-58 season to $3.67 in the 1958-59 season. This increase of 5 cents was reflected in a rise in the farm value from 55 cents to 60 cents a pound. The farm-retail spread, excluding excise taxes, declined slightly because of an increase in State excise taxes.

A special study of the margins and costs of cigarette tobaccos and cigarettes showed that returns to farmers and to manufacturers and distributors all have increased in the postwar period (fig. 19). The farmer's share of 15.7 percent of the retail price in 1958 was about the same as in the 1948-52 period. The share going to manufacturers also was about the same in the two periods, but the share going to distributors was higher in 1958. Federal excise taxes took a smaller share of the retail price in 1958, but State excise taxes made up a slightly larger proportion.

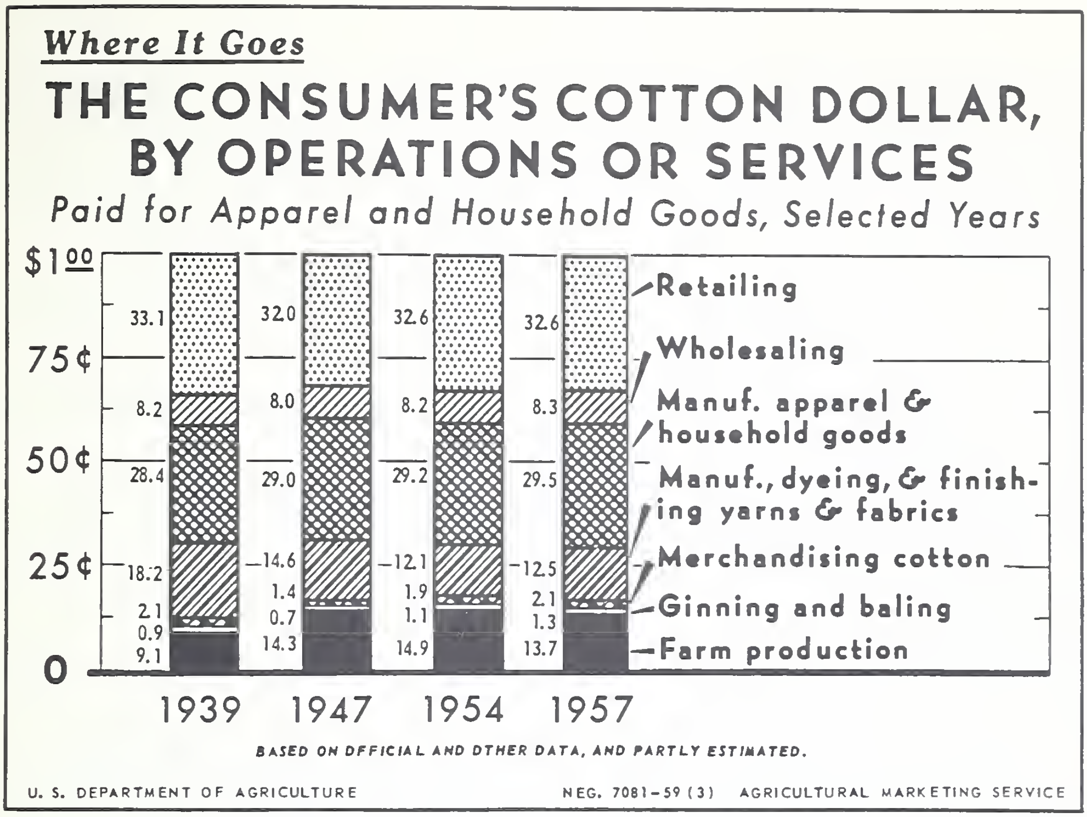

Figure 18

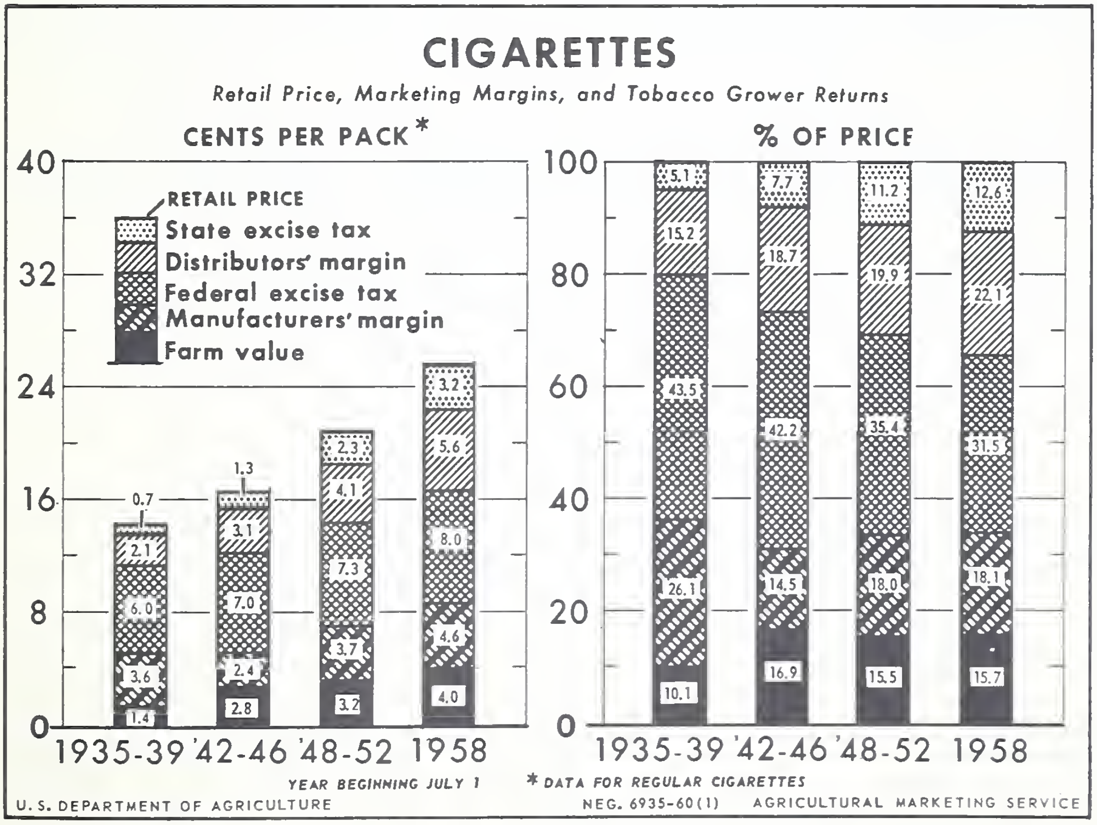

Figure 19

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Marketing Costs for Fresh Milk. Misc. Pub. No. 733. Revised Feb. 1959.

Marketing Margins for Sugar. Mktg. Res. Rpt. No. 311. Mar. 1959.

Irrigation--A Low Cost Method of Sewage Disposal for the Poultry Processor. Mktg. Res. Rpt. No. 306. Mar. 1959.

Farm-to-Retail Price Spreads of Cheddar Cheese in the South. Mktg. Res. Rpt. No. 318. Apr. 1959.

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Marketing Margins for White Bread. Misc. Pub. No. 712. Revised Apr. 1959.

Volume-Weight Relationships of Farmers Stock Peanuts Stored in Bulk. AMS-303. May 1959.

Costs of Operating Southern Rice Mills. Mktg. Res. Rpt. No. 330. June 1959.

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Factors Affecting Costs of Wholesale Distribution of Frozen Foods. Mktg. Res. Rpt. No. 327. June 1959.

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Flaxseed Storage at Country Elevators in Minnesota, North Dakota, and South Dakota. Mktg. Res. Rpt. No. 350. July 1959.

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Economies of Scale in Chicken Processing. AMS-331. Aug. 1959.

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Costs of Packing Arkansas Peaches in 1958. Mktg. Res. Rpt. No. 361. Sept. 1959.

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Candling and Cartoning Eggs at Country Plants. Mktg. Res. Rpt. No. 366. Dec. 1959.

Lard Marketing Margins and Costs. Mktg. Res. Rpt. No. 376. Jan. 1960.

What Your Food Money Buys. Food, 1959 Yearbook of Agriculture.

Milk Distributors Sales and Costs. Quarterly.

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Comparative Costs of Alternative Methods for Performing Certain Handling Operations in Florida Citrus Packinghouses. Florida Agr. Expt. Sta. Bul. 609. June 1959.

Factors Affecting the Output, Size, Costs and Location of Poultry Plants in Southern New England. 1. Costs, Efficiency and Economies of Scale in Broiler Processing Plants. Connecticut Agr. Expt. Sta. Bul. 342. Sept. 1959.

Plum Packing Costs and Efficiency: The Effects of Packing Methods and Type of Container. California Agr. Expt. Sta., Mimeo Rpt. No. 225. Dec. 1959.

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Trends in Labor Input and Output in Selected Agricultural Processing Industries, 1947-57. Oct. 1959.

Agricultural Marketing:

Transporting Livestock by Truck. Mar. 1959.
Food Marketing Industries. Apr. 1959.

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- Livestock Terminal Markets. Apr. 1959.
- Marketing Costs for Sugar. May 1959.
- Costs of Operating Southern Rice Mills. July 1959.
- Quality and Weight Changes in Stored Wheat. Sept. 1959.
- Lard Marketing Margins and Costs. Oct. 1959.
- Do Quality Eggs Pay Off? Nov. 1959.
- Workers' Earnings in Food Marketing Industries. Nov. 1959.
- Price Spreads for Formulated Poultry Feeds in Illinois. Dec. 1959.
- Costs of Marketing Food Products. Jan. 1960.
- Marketing Channels Are Getting Shorter. Jan. 1960.
- Cotton and Wool Can Meet Competition. Feb. 1960.

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- Handle Your Eggs with Care and Profit. June 1959.
- Where Does the Dollar Consumers Spend on Cotton Go? June 1959.
- What's the Farmer's Share of the Consumer's Milk Dollar? July 1959.
- How Much Does It Cost to Market Our Farm Food? Aug. 1959.
- Farmer's Share of Food Dollar Dropped Last Year. Feb. 1960.

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- Marketing Channels and Division of Consumer's Dollar for Cotton and Wool. Apr. 1959. Reprinted as AMS-307.
- Marketing Spreads for Turkeys in Selected Cities. Apr. 1959. Reprinted as AMS-308.
- Assembling New England Poultry. Apr. 1959. Reprinted as AMS-309.
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- Trends and Prospects for Marketing Textiles. Nov. 1959. Reprinted as AMS-351.
- Magnitude of Taxes in Marketing Food Products. Jan. 1960. Reprinted as AMS-364.
- Marketing Margins for Dairy Products. Jan. 1960. Reprinted as AMS-297.
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